QUARTERLY REP[redacted]T [redacted]

CONTRACT [redacted] DA 92-557-FEC-35859

INCLUSIVE DATES 1 June 1962 TO 31 August 1962

SUBJECT OF INVESTIGATION

STUDIES ON IMMUNOLOGICAL
DIAGNOSIS AND THERAPY OF
PARAGONIMIASIS

RESPONSIBLE INVESTIGATOR

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Quarterly Report

Abstract report of the progress and phase of the work for one year from 1 March 1962 through 28 February 1963 and studied during the period from 1 June 1962 to 31 August 1962.

1. Studies on the minimum effective dose of Bithionol and roentogenological findings after treatment.

The purpose of the investigation is being made to determine the minimum effective dose of Bithionol on paragonimiasis.

This study was carried out on the patients visited themselves at National Kochi Hospital by the various subjective symptoms and diagnosted as paragonimiasis during the period from august 1960 to December 1961.

80 cases of paragonimiasis patients were divided into 4 groups. In each of the groups drily dose of 20 mg/kg, 30 mg/kg, 40 mg/kg and 50 mg/kg of Bithionol were given every other day ~~from~~ for 5 to 15 doses respectively.

In all cases, the paragonimus eggs in stool and sputum have ~~became~~ become negative from 5 to 15 days after starting the medication of Bithionol.

In 78 cases out of 80 cases, paragonimus eggs have never reappeared during the period from 6 months to 1 year after treatment as shown in Table 1.

No significant differences concerning the times of disappearance of paragonimus eggs in stool and sputum among those groups received 5, 10 and 15 doses of 50 mg/kg, 10 and 15 doses of 40 mg/kg, 10 and 15 doses of 30 mg/kg and 15 doses of 20 mg/kg of Bithionol.

The frequency of the side effects due to Bithionol showed the Tendency of decrease according to the decrease in the daily dose of Bithionol and also lower in children than that of adults.

The improvements of the pathological findings in chest X-Ray films taken immediately , 1, 3 and 6 months after treatment were shown in Table 2.

2. Studies on the minimum dose of Bitin (Bithionol) and Bitin-s-oxide.

The authors found that Bitin-s-oxide, a derivative of Bithionol, was more effective against the larvae of Paragonimus westermani in vitro than Bitin (Bithionol).

18 cases of paragonimiasis patients were found by means of screening methbd with intradermal test for paragonimiasis in Shika-machi, Ishikawa Prefecture.

These 18 cases divided into 2 groups. In each groups, daily dose of 10 mg/kg of Bitinand 10 mg/kg of Bitin-s-oxide were given 10 doses every other day. for

In all cases, the paragonimus eggs in stools became negative from 4 to 18 days after starting the medication.

This treatment has just finished on 7th August 1962. The follow-up studies of these cases are now being made by stool examination, complement fixation test and chest X-Ray.

Table 1. Therapeutic effects

Daily dose	Method of administration	No. of doses	No. of cases	Therapeutic effects No. of cases cured	No. of cases recurred
50 mg/kg	every other day	15	18	18	0
	"	10	4	4	0
	"	5	1	1	0
40 mg/kg	every other day	15	14	14	0
	"	10	12	12	0
	"	5	1	0	1
30 mg/kg	every other day	15	2	2	0
	"	10	14	14	0
	"	5	1	1	0
20 mg/kg	every other day	15	4	4	0
	"	10	9	8	1
Total			80	78	2

Table 2. Results of the follow-up studies on the chest X-Ray findings of the patients.
(129 pathological shadows in 78 cases)

Lapse of the time after the treatment	disappeared	reduced	unchanged	Total
Immediately after	27(20.9%)	83(64.3%)	19(14.7%)	129
1-3 months	78(61.2%)	41(31.8%)	9(7.0%)	129
4-6 months	98(76.0%)	26(20.2%)	5(3.9%)	129